

REMARKS

This is intended as a full and complete response to the Office Action dated May 19, 2004, having a shortened statutory period for response set to expire on August 19, 2004. Please reconsider the claims pending in the application for reasons discussed below.

Double Patenting

Claims 1-2 and 4-25 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3-9 and 14-17 (amended claims) of copending Application No. 10/011,605 (*Gysling*). Claims 1-2 and 4-25 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 7-8, 14, 17-19, 23-24, 31-32, 35-38 of copending Application No. 10/636,095 (*Gysling*) in view of either U.S. Patent 6,354,147 (*Gysling, et al.*) or U.S. Patent 6,601,458 (*Gysling, et al.*).

Applicant respectfully submits that all other rejections are overcome by this response. The examiner should withdraw the double patenting rejections and permit the application to issue as a patent once the double patenting rejections are the only rejections remaining in that application. M.P.E.P. § 804 (I)(B) *Between Copending Applications- Provisional Rejections*. Since the provisional double patenting rejections would provide the only rejections remaining, Applicant requests withdrawal of the provisional double patenting rejections. Therefore, Applicant believes that claims 1-2 and 4-25 are in condition for allowance and respectfully requests allowance of the same.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-2 and 4-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Vedapuri, et al.* (U.S. Patent 6,502,465) "*Vedapuri*" in view of either *Gysling, et al.* (U.S. Patent No. 6,354,147) "*Gysling '147*" or *Gysling, et al.* (U.S. Patent No. 6,601,458) "*Gysling '458*."

The Examiner states that *Vedapuri* discloses a method and apparatus for determining rate of flow comprising, as illustrated in Figures 1-5, a first speed sound meter G1-G4, L1-L4 coupled to the outside of a first section of a pipe 10 having a first compliancy for determining a first effective speed of sound; a second speed of sound meter G1-G4, L1-L4 coupled to the outside of a second section of pipe 10 having a second compliancy for determining a second effective speed of sound; a signal processor 44 for determining the flow rate of the fluid mixture flowing in the pipe from the first and second effective speeds of sounds.

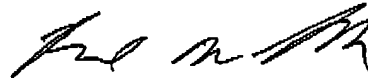
Applicant respectfully traverses the rejection. The claims recite the limitations of either a signal processor which provides a density signal based on a calculation using signals from two meters positioned at sensing regions with different compliances or calculating the density using two parameters measured at sensing regions with different compliances.

To the contrary, *Vedapuri* discloses measuring a flow velocity by either 1) a transit time algorithm or 2) a cross correlation algorithm. Both algorithms are based on transmitted ultrasonic signals detected in time by a set of transducers (either from group G1-G4 for gas or from group L1-L4 for liquid) at first and second portions of the pipe. Signals from the transducers within each group of transducers are analyzed by one of the algorithms, and each group of transducers appears to have the same compliancy. There is no teaching or suggestion in *Vedapuri* of performing any calculations that use signals from both groups of transducers since the signals from each group of transducers are processed separately from one another. For the foregoing reasons, any combination of *Vedapuri* with *Gysling* '147 or *Gysling* '458 fails to teach, show or suggest the claimed invention. Accordingly, Applicant respectfully requests withdrawal of the rejection and allowance of the claims.

Conclusion

The references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed. Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



Randol W. Read
Registration No. 43,876
MOSER, PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant